

**METHOD AND APPARATUS FOR IMAGE PROCESSING IN A HANDHELD DEVICE****ABSTRACT**

The present invention provides a method and apparatus for image processing using a graphics processor in a handheld device including a first memory device receiving a video input signal containing encoded video frame having a plurality of portions of encoded video frame data. The first memory device has a storage capacity less than all of the plurality portions of the encoded video frame data. The method and apparatus further includes the graphics processor coupled to the first memory device, wherein the graphics processor receives the first portion of the encoded video frame data and generates a first graphics portion. A second memory device receives the first graphics portion and stores the first graphics portion therein. As such, the encoded video frame is processed on a portion-by-portion basis using the first memory device and the second memory device in conjunction with the graphics processor.